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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,339	03/19/2001	Hiroshi Yamaguchi	Q62091	6698

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WASHINGTON, DC 20037-3213

EXAMINER

HO, TUAN V

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 06/30/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/810,339

Applicant(s)

YAMAGUCHI, HIROSHI

Examiner

Tuan V Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8 and 19 is/are rejected.
- 7) ☒ Claim(s) 7 and 9-18 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Asao (JP 3-70274) and English translation.

With regard to claim 1, Asao discloses in Fig. 1, an image pickup device that comprises the optical lens (lens system 2, paragraph 1, page 4 of the translation), photographing unit (image pickup element CCD 4), and light quantity adjustment unit (liquid crystal panel 3 is located in the optical path of lens system 2 and CCD 4 as shown in Fig. 1; where the panel 3 partially adjusts the light quantity incident on CCD 4, pages 5, last paragraph and page 6).

With regard to claim 2, Asao discloses in Fig. 1, an image pickup device that comprises the light quantity adjustment unit

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is a unit for relatively reducing a light quantity of an area corresponding to a bright portion of the image of said subject when the image is taken by said photographing unit (control signal formation circuit 8 controls panel 3 so as to reduce a brightness level in an image signal, page 5 paragraphs 2 and 3).

With regard to claim 5, Asao discloses in Fig. 1, an image pickup device that comprises the photographing unit is an image pickup device for photoelectrically reading the image of said subject (the image pickup device of Asao includes CCD 4 generating image signals of a subject).

With regard to claim 6, Asao discloses in Fig. 1, an image pickup device that comprises the light quantity adjustment unit is a filter through which the light carrying the image of said subject is transmitted and is a light transmittance variable filter which changes a light transmittance of an area corresponding to a portion of the image of said subject where the light quantity is adjusted (liquid crystal panel 3 is used as a filter that filters image light at a particular high light portion; where the high light portion area can be located on any positions of panel 3, page 5).

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 4 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asao.

With regard to claim 3, Asao discloses the same subject matter as discussed with respect to claim 1, except that the light quantity adjustment unit is a unit for relatively increasing a light quantity of an area corresponding to a dark portion of the image of said subject when the image is taken by said photographing unit.

Asao does not explicitly disclose any increasing a light quantity of an area corresponding to a dark portion of the image of said subject when the image is taken by said photographing unit. However, Official Notice is taken that a liquid crystal panel is used to increase or decrease a light quantity in order to adjust a brightness level of an image light. Noted that each

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sections of panel 3 of Asao can be adjusted independently, col. 5, paragraph 1.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the control circuit 8 of Asao so as to increase light a light quantity of a dark area of panel 4 and to obtain a proper exposure and thereby to improve the image quality.

With regard to claim 4, Asao discloses the same subject matter as discussed with respect to claim 1, except that light adjusting unit is a unit for adjusting the light quantity of the image of the subject for each color channel of the photographing unit when the image is taken by the photographing unit.

Asao does not explicitly discloses any light adjusting unit adjusting the light quantity of the image for each color channel. Official Notice is taken for a R, G and B LCD, where the LCD can adjust light intensity for each color channel.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the LCD 3 of Asao with a r, g and B LCD so as to adjust light quantity for each color channel because the replacement of Asao LCD with a R, G and B LCD would refine a color light filtering of an image and improve color quality of the image.

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With regard to claim 19, Asao discloses the same subject matter as discussed with respect to claim 1, except that the photographing unit is a unit for reading the image of said subject photoelectrically, information on an adjustment of the light quantity in said light quantity adjustment unit is recorded and held together with image data read after the adjustment has been made by said light quantity adjustment unit.

Asao does not explicitly disclose any adjustment information of light adjustment unit and image data that are recorded together. However, Official Notice is taken that attribute data such as exposure values (F stops) is recorded on a recoding medium together with image data in order that a user can verify the exposure data at the time taking the picture and thereby to improve the user's photographing skill.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the control circuit of Asao system so as to record information on an adjustment of panel 3 together with the image data in order to verify the camera setting at the time taking the picture.

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4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Asao in view of Hisatomi (JP 3-220878) and English translation.

Asao discloses the same subject matter as discussed with respect to claim 1, except that the light quantity adjustment unit is disposed at a position deviating from an imaging position where the image of said subject is imaged by said optical lens.

Asao does not explicitly disclose any light quantity adjustment unit that is disposed at a position deviating from an imaging position. However, Hisatomi teaches using a LCD 3 that is used to apply filtering and mask high light part surrounding the subject so as the camera can properly adjust the image exposure (page 3 of the translation, last paragraph).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the position of panel 3 of Asao as the same fashion as disclosed by Hisatomi so to obtain a light quantity adjustment unit located at a position deviating from an imaging position. This is because the deviating position of panel 3 would allow direct image light to CCD 4 after adjusted by the panel and thereby to improve focusing operation and providing a sharp image.

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5. Claims 7 and 9-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Viliesid discloses an image capture apparatus that includes LCD filter.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUAN HO whose telephone number is (703) 305-4943. The examiner can normally be reached on Mon-Fri from 7AM to 4PM.

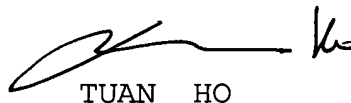
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WENDY GARBER, can be reached on (703) 305-4924. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

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A handwritten signature in black ink, appearing to read 'Tuan Ho', with a stylized flourish at the end.

TUAN HO

Primary Examiner

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